AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT

1. CONTRACT ID CODE	PAGE OF PAGES
	1 21

2. AMENDMENT/MODIFICATION NO.	3. EFFECTIVE DATE	4. REQUISITION/PURCHASE REQ. NO.	5. PROJECT NO. *(If applicable)*
000001	01/28/2009		

6. ISSUED BY CODE ICE/SS

ICE/Strategic Sourcing
Immigration and Customs Enforcement
Office of Acquisition Management
801 I Street NW Suite 980
Washington DC 20536

7. ADMINISTERED BY *(If other than Item 6)* CODE ICE/SS

ICE/Strategic Sourcing
Immigration and Customs Enforcement
Office of Acquisition Management
801 I Street NW Suite 980
Attn: Dana Funk
Washington DC 20536

8. NAME AND ADDRESS OF CONTRACTOR *(No., street, county, State and ZIP Code)*

CODE FACILITY CODE

(x) 9A. AMENDMENT OF SOLICITATION NO.
HSCESS-09-Q-00001

x 9B. DATED *(SEE ITEM 11)*
01/08/2009

10A. MODIFICATION OF CONTRACT/ORDER NO.

10B. DATED *(SEE ITEM 11)*

11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS

☒ The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers ☒ is extended, ☐ is not extended.
Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods: (a) By completing Items 8 and 15, and returning 1 copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGEMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

12. ACCOUNTING AND APPROPRIATION DATA *(If required)*

13. THIS ITEM ONLY APPLIES TO MODIFICATION OF CONTRACTS/ORDERS. IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.

CHECK ONE	
	A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: *(Specify authority)* THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.
	B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES *(such as changes in paying office, appropriation date, etc.)* SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b).
	C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:
	D. OTHER *(Specify type of modification and authority)*

E. IMPORTANT: Contractor ☐ is not, ☐ is required to sign this document and return _____ copies to the issuing office.

14. DESCRIPTION OF AMENDMENT/MODIFICATION *(Organized by UCF section headings, including solicitation/contract subject matter where feasible.)*

1. The purpose of this amendment is to revise the Statement of Work (SOW), incorporate the questions received from industry and corresponding answers, and extend the date and time for receipt of offers.

2. The revised SOW, entitled "Statements of Work for Shotguns," is incorporated into the solicitation as Attachment 1.1. Revisions to the SOW are delineated by a vertical black line in the left-hand margin of the page.

3. Questions submitted by industry and their corresponding answers are incorporated into the solicitation as Attachment 4.

Continued ...

Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.

15A. NAME AND TITLE OF SIGNER *(Type or print)*		16A. NAME AND TITLE OF CONTRACTING OFFICER *(Type or print)*	
		Carmen G. Rios	
15B. CONTRACTOR/OFFEROR	15C. DATE SIGNED	16B. UNITED STATES OF AMERICA	16C. DATE SIGNED
_____ *(Signature of person authorized to sign)*		_____ *(Signature of Contracting Officer)*	

ITEM NO. (A)	SUPPLIES/SERVICES (B)	QUANTITY (C)	UNIT (D)	UNIT PRICE (E)	AMOUNT (F)
	4. The date and time for receipt of offers, samples, and past performance questionnaires is extended to 5:00pm local time on 18 February 2009.				

STATEMENTS OF WORK FOR 12 GAUGE SHOTGUNS

U.S. Immigration and Customs Enforcement (ICE)
National Firearms Tactical Training Unit (NFTTU)

STATEMENT OF WORK (SOW) I: 12 GAUGE DUTY SHOTGUNS

1.0 SCOPE

This specification delineates performance criteria and tests to be used for the evaluation of duty shotgun candidates for US Immigration and Customs Enforcement (ICE), Department of Homeland Security (DHS).

2.0 APPLICABLE DOCUMENTS

2.1 General. This specification lists all performance requirements for the acquisition of ICE duty shotguns.

2.2 Government Documents. The following documents form a part of this document to the extent specified herein:

MIL-STD-810F: Department of Defense Test Method Standard for Environmental Engineering Considerations and Laboratory Tests

2.3 Non-Government publications. The following documents form a part of this document to the extent specified herein:

ANSI/SAAMI Z299.2-1992: Voluntary Industry Performance Standards for Pressure & Velocity of Shotshell Ammunition for the Use of Commercial Manufacturers
Sporting Arms and Ammunition Manufacturer's Institute (SAAMI)
P.O. Box 262
Frankfort, NY 13340

ISO 9001:2000, Quality Management Systems Requirements
International Organization for Standardization
1, rue de Varembe, Case postale 56
CH-1211 Geneva 20, Switzerland

(Non-Governmental standards and other publications are normally available from the organizations that prepare or distribute the documents. These documents may also be available in or through libraries or other informational services).

2.4 Order of Precedence. In the event of a conflict between the text of this specification and the references cited herein, this document takes precedence.

3.0 REQUIREMENTS

3.1 General. US ICE, an agency under the Department of Homeland Security (DHS), has a requirement for a 12-gauge duty shotgun. Each vendor will be allowed to submit one specific 12-gauge duty shotgun nomenclature. A solicitation sample of 12 shotguns shall be required for evaluation and testing.

3.2 Solicitation Tests. The solicitation testing will verify that the initial shotgun sample supplied by each competing vendor meets the minimum requirements of this specification. Vendors will be rated on their ability to achieve and/or surpass all performance parameters detailed in Table I. Those performance characteristics listed under Basic Compliance criteria shall be documented by the contractor and/or determined by Non Destructive Inspection (NDI). Major performance characteristics are requirements that will be ascertained by functional testing of the ammunition. Testing may be halted for any sample (and the associated sample rejected) when a shotgun from that sample fails any Basic Compliance or Major requirement (as determined by NFTTU). Testing will be halted if a shotgun from that sample exhibits

hazardous and/or unsafe attributes (as determined by NFTTU). All samples submitted pursuant to solicitation testing will become property of DHS/ICE NFTTU upon receipt and will not be returned.

Table I: Requirements Verification Test Matrix

	Performance Characteristic	Requirement Paragraph	Test Method	Solicitation	FAT*	LTI*
Basic Compliance	Sample Size	3.6	4.2	X	X	
	Documentation	3.5	4.3	X	X	
	Quality System	3.3	4.4	X		
	Action/Mechanism	3.7	4.5	X	X	X
	Overall Length	3.8	4.6	X	X	X
	Weight	3.9	4.7	X	X	X
	Gauge	3.10	4.8	X	X	X
	Firing Pin Indent	3.11	4.9	X	X	
	Trigger	3.14	4.12	X	X	X
	Finish	3.15	4.13	X	X	X
	Safety	3.16	4.14	X	X	X
	Barrel	3.17	4.15	X	X	X
	Magazine	3.18	4.16	X	X	X
Major	Reliability/Durability	3.20	4.18	X	X	
	High Temperature	3.21	4.19	X	X	
	Low Temperature	3.22	4.20	X	X	
	Salt Water Immersion	3.23	4.21	X	X	
	Sand & Dust	3.24	4.22	X	X	
	Parts Interchange	3.25	4.23	X	X	
	Drop Test	3.26	4.24	X	X	
	Shot Pattern/Accuracy	3.27	4.25	X	X	
Minor	Stock/Forearm	3.12	4.10	X	X	X
	Sling Attachments	3.13	4.11	X	X	X
	Sights	3.19	4.17	X	X	X

*FAT: First Article Test *LTI: Limited Technical Inspection

3.3 Quality Control (QC). The contractor shall have a QC system in place. It is desired that the manufacturer have a quality system that is commensurate with ISO 9001: 2000, Quality Management Systems Requirements.

3.3.1 Quality Control (QC)/Quality Assurance (QA). The manufacturer shall provide a QC/QA process synopsis including examples of their quality plans for the manufacturing of the shotguns representing their solicitation sample.

3.3.2 First Article Test (FAT). The specifications annotated for FAT in Table I will be verified during the FAT. All firearms must exhibit performance that is comparable to what was exhibited during solicitation testing for all requirements during FAT. At the government's discretion, DHS/ICE NFTTU may elect to reduce the number of specifications that are subjected to testing during the FAT process. All samples submitted pursuant to FAT will become property of DHS/ICE NFTTU upon receipt and will not be returned. The Government may invoke a FAT for any of the following conditions (after contract award):

a. Design change of the shotgun or shotgun components.

b. Relocation of vendor's production facility.

c. Vendor changes supplier of critical components (barrel, receiver, internal mechanism parts).

The contractor shall be responsible for notifying the government prior to enacting any of the above changes and for conducting an FAT for any of the above conditions.

3.4 Limited Technical Inspection (LTI). An LTI will be conducted for every firearm delivered after the first article. All firearms must exhibit performance that is comparable to what was exhibited during solicitation

testing for all requirements during LTI. The specifications annotated for LTI in Table I will be verified during the LTI.

3.5 Documentation. The supplier shall provide the following documentation (unless otherwise annotated) detailing the performance of the shotgun sample submitted for solicitation testing and FAT:

- Owner's Manual, including recommended maintenance procedures and intervals.
- Description of manufacturing process.
- Written synopsis of Company's Quality Control System.
- Detailed response to each of the basic compliance requirements (on how the requirements are fulfilled)

3.6 Sample Size. Twelve shotguns shall be submitted for solicitation testing and/or FAT evaluation.

3.7 Action/Mechanism. The action shall be a pump-action. The action shall be designed to operate smoothly during cycling with no binding. The mechanism shall possess an inertia firing pin and a balanced sear, or similar component, to prevent accidental discharges if the firearm is dropped. The shotgun shall be designed in such a way that the operator can clear a malfunction using immediate action with no tools. The shotgun shall be capable of being unloaded by removing the cartridges directly from the magazine. The firearm shall be able to be safely operated by a shooter wearing gloves.

3.8 Overall Length. The overall length of the shotgun shall not exceed 35".

3.9 Weight. The empty weight of the shotgun shall not exceed 7.75 lbs.

3.10 Gauge. The shotgun shall be chambered for 12-gauge 3 inch magnum cartridges. All chamber dimension specifications and pressure limitations shall conform to the Sporting Arms and Ammunition Manufacturer's Institute (SAAMI) specifications for 12-gauge (chambered for 3 inch magnum cartridges) shotguns.

3.11 Firing Pin Indent. Firing pin indentation shall conform to the Sporting Arms and Ammunition Manufacturers Institute (SAAMI) specifications for 12-gauge shotguns.

3.12 Stock/Forearm. The stock shall be a fixed, vertical pistol grip stock constructed of a durable composite material and equipped with a recoil absorbing pad, measuring 13 inches in length of pull (LOP) from the center of the curve of the trigger to the center of the recoil pad. The LOP dimensional tolerance is $\pm$0.125 inches. The stock shall have a black, non-reflective finish and incorporate a non-slip grip surface. The following optional stock shall also be available for the shotgun:

a. Version with 13.75 inch LOP having the same exterior dimensions and other features as the standard stock.

b. Version designed to securely store a minimum of four rounds of 12-gauge ammunition having the same exterior dimensions and other features as the standard stock. LOP may be up to 14 inch.

c. Version that possesses a recoil reduction or recoil dampening system.

The forearm shall be constructed of the same material as the stock and have a non-reflective finish with a non-slip, raised rib type grip surface to prevent the shooter's hand from sliding off the grip. The design shall be equal to or better than the Speedfeed LE forearm, part number 0256. The forearm shall not cover any portion of the ejection or loading ports when pulled fully to the rear. The firearm shall have the option of being supplied with a forearm that incorporates an integral light mount on a "1913 rail" with covers, to accommodate the attachment of a light. The forearm with "1913 rail" light mount is not required to be the same material as the stock. The "1913 rail" may be of a different material than the forearm.

3.13 Sling Attachments. The shotgun shall be equipped with sling attachments that accommodate the use of a 1 ¼" wide sling. The front sling attachment shall be designed to accommodate a left side, right side or bottom sling attachment and shall be positioned on the shotgun between the muzzle and the front end of the

forearm. The sling attachment shall not swivel. The rear sling attachment shall be permanently attached to the firearm within 3 inches of the toe of the recoil pad (on the underside of the stock).

3.14 Trigger. The trigger pull shall be not less than 5 pounds and not more than 8 pounds force.

3.15 Finish. The external finish shall be a matte black or grey color that is corrosion resistant. "Corrosion resistant" is the ability to prevent formation of corrosion under normal operating conditions.

3.16 Safety. The shotgun shall be equipped with an externally controlled, manual, and non-locking safety mechanism that possesses both a "safe" and "fire" position. When in the "safe" position, the safety mechanism shall prevent the firearm from firing. The shooter shall be able to visually and physically verify the position of the safety.

3.17 Barrel. The barrel shall have a non-removable modified choke. Barrel length shall be a minimum of 14 inches and a maximum of 14.5 inches. Barrels shall be easily interchangeable without special tools.

3.18 Magazine. The magazine shall have a capacity to hold five (5) 2 ¾ inch, 12-gauge cartridges loaded at the maximum overall length as specified by SAMMI for 12-gauge ammunition. The magazine follower shall be of a highly visible color, non-binding, and resistant to particle accumulation. The shooter shall be able to ascertain if the magazine is empty by either visually or physically checking the position of the follower.

3.19 Sights. The front sight shall be of a snag resistant, square steel blade design of sufficient height to afford zeroing the sights to point of impact, with a black or dark gray non-reflective finish and equipped with a tritium insert that is contained in a break resistant ampoule. The front sight shall be non-adjustable for windage and elevation. The front sight shall not have side guards/wings. The rear sight shall be of a large-aperture "ghost ring" design, with a black or dark gray non-reflective finish and mounted at the rear of the receiver. The rear sight assembly shall be removable and allow the top to the receiver to be unobstructed after the rear sight assembly is removed. The rear sight shall be fully adjustable for windage and elevation, and equipped with tritium inserts contained in break resistant ampoules. The tritium inserts shall be placed in the rear sight that, when properly aligned with the front sight, will form a horizontal line or "3 dot configuration" over the target. The rear sight shall not have side guards/wings. The rear sight shall be designed for replacement without the use of special tools or soldering. The rear sight shall be designed to allow replacement of the ring aperture without requiring the replacement of the entire sight assembly, unless replacing the entire rear sight is similar in time and cost to replacing the aperture ring only. Both the front and rear sights shall be able to withstand 3-foot drop testing without rendering the sights unserviceable. Tritium failure during the drop test will not be considered unserviceable.

3.20 Reliability/Durability. The shotgun shall be able to fire 10,000 rounds of duty ammunition (7,500 rounds of standard load, full power, 00 buckshot and 2,500 rounds standard, full power load, 1 oz. slug) with no more than the number and types of malfunctions (not due to ammunition or for a single shotgun) listed in Table II.

Table II: Reliability/Durability Malfunction and Type Allowance

Class	# Malfunctions	Type
1	17	Malfunction can be cleared by the operator under 10 seconds.
2	7	Malfunction that cannot be cleared by operator within 10 seconds; but can be cleared by operator with equipment immediately available to a law enforcement officer in the field (i.e., Leatherman-type tool or pocketknife).
3	1	Malfunction not correctable by operator and requires a higher level of maintenance. This may include the replacement or repair of a part other than the barrel, bolt, pump action assembly, or receiver.
4	0	Catastrophic malfunction that requires replacement of the barrel, bolt, pump action assembly, receiver, and/or anything that affects safe operation.

Table III: High/Low Temperature, Salt Water Immersion, and Sand & Dust Malfunction and Type Allowance

Class	# Malfunctions	Type
1	1	Malfunction can be cleared by the operator under 10 seconds.
2	0	Malfunction that cannot be cleared by operator within 10 seconds; but can be cleared by operator with equipment immediately available to a law enforcement officer in the field (i.e., Leatherman-type tool or pocketknife).
3	0	Malfunction not correctable by operator and requires a higher level of maintenance.
4	0	Catastrophic malfunction that requires replacement of the barrel, bolt, pump action assembly, receiver, and/or anything that affects safe operation.

3.21 High Temperature. The shotgun shall exhibit not more than the number and type of malfunctions listed in Table III during a 40 round firing cycle, after temperature soaking of the shotgun for 8 hours at $160^{o}\pm5$F.

3.22 Low Temperature. The shotgun shall exhibit not more than the number delineated for each type of malfunction listed in Table III during a 40 round firing cycle, after temperature soaking of the shotgun for 8 hours at $-45^{o}\pm5$F.

3.23 Salt Water Immersion. The shotgun shall exhibit not more than the number delineated for each type of malfunction listed in Table III during a 40 round firing cycle, after immersion in a 5% saline solution at a depth of 6 inches for one minute followed by 24 hours in an environmental chamber at 70^{o}F and 70% humidity.

3.24 Sand & Dust. The shotgun shall exhibit not more than the number and type of malfunctions listed in Table III during a 40 round firing cycle, after being subjected to a blowing sand and dust environment in accordance with MIL-STD-810F.

3.25 Parts Interchange. All shotgun components of the same model subjected to field-stripping shall be 100% interchangeable between shotguns without additional fitting or alternation. Upon re-assembly, the shotgun shall be fully functional.

3.26 Drop Test. The shotgun shall be equipped with a discharge control mechanism that is designed to prevent the firearm from discharging as a result of an impact, while the hammer is in the cocked position, with the safety off. Additionally, the shotgun shall be serviceable and exhibit no major damage as the result of being dropped on a concrete pad from a height of three feet in the following orientations:

a. Muzzle facing the concrete pad.

b. Butt of stock down facing the concrete pad.

c. Top of the receiver and barrel facing the concrete pad.

Major damage is defined as damage that would result in the gun being unsafe to fire, discharging during testing, or malfunctioning during firing.

3.27 Shot Pattern/Accuracy.

3.27.1 Shot Pattern. The shotgun shall be able to place at least 8 of 9 of the buckshot pellets (using duty 00 buck shot ammunition) within a 25" diameter circle at a range of 25 yards.

3.27.2 Accuracy. The shotgun shall exhibit a mean radius of no greater than 2.75 inches and an extreme spread of no more than 8 inches when firing duty standard load 1oz slug ammunition at a range of 50 yards.

4. 0 VERIFICATION

4.1 Performance verification. Table I details all performance criteria. Except as otherwise specified, ICE NFTTU reserves the right to perform any of the inspections and tests set forth in this specification where

such inspections and tests are necessary to ensure that supplies and services conform to prescribed requirements.

4.2 Sample Size. All samples submitted will be visually inspected to ensure the proper sample size was submitted.

4.3 Documentation. All required documentation shall accompany the sample and will be examined by NFTTU for accuracy.

4.4 Quality Control (QC). The government will analyze the vendor's QC system description for basic compliance. If the contractor is ISO 9001:2000 certified, they shall submit written proof of ISO 9001:2000 certification from an accredited agency. NOTE: ISO 9001:2000 certification is not required, but will suffice for compliance with 3.3. Additionally, government personnel may perform a QC system audit after contract award. If conducted, the audit will be performed at the vendor's manufacturing facility.

4.5 Action/Mechanism. All samples submitted will be visually and physically examined by NFTTU armorers to ensure compliance.

4.6 Overall Length. All samples submitted will have the overall length measured with a calibrated scale to verify dimension.

4.7 Weight. All samples submitted will be weighed using a calibrated electronic scale to verify weight.

4.8 Gauge. All samples submitted will have the chamber dimensions verified by physical inspection and the use of certified (in accordance with SAAMI) go/no-go gauges.

4.9 Firing Pin Indentation. All samples submitted will have the firing pin indent verified following NFTTU testing procedures.

4.10 Stock/Forearm. All samples submitted will be visually and physically examined by NFTTU armorers to ensure compliance.

4.11 Sling Attachments. All samples submitted will be visually and physically examined by NFTTU armorers to ensure compliance.

4.12 Trigger. All samples submitted will have the trigger pull measured by a calibrated trigger pull tester.

4.13 Finish. All samples submitted will be visually and physically examined by NFTTU armorers to ensure compliance.

4.14 Safety. All samples submitted will be visually and physically examined by NFTTU armorers to ensure compliance of the shotgun safety mechanism. The safety mechanism of all samples submitted shall be tested for compliance by actuating and checking for function every 200 rounds during the reliability/durability test phase.

4.15 Barrel. All samples submitted will have the barrel length measured with a calibrated scale to verify dimension.

4.16 Magazine. All samples submitted will be visually and physically examined by NFTTU armorers to ensure compliance. The shotgun must be designed to hold five rounds of SAAMI maximum length rounds. Five dummy rounds will be measured with a caliper to determine their combined total length. The combined total length of five maximum SAAMI length 12 gauge cartridges will be calculated. The difference between actual and SAAMI maximum will then be calculated. The five dummy rounds will be loaded into the shotgun magazine tube. The last round must be able to be pushed further forward into the magazine tube at least the calculated difference.

4.17 Sights. All samples submitted will be visually and physically examined to NFTTU armorers to ensure compliance.

4.18 Reliability/Durability. All samples submitted will undergo a 3,000 round (per shotgun) reliability test in multiples of 200 round firing cycles. Three shotguns will also undergo an additional 7,000 round (per shotgun) durability test in multiples of 200 round firing cycles. Each firing cycle will consist of 150 rounds of duty 00 buckshot ammunition followed by 50 rounds of 1 oz slug ammunition for a total of 50 cycles. The shotguns will be cleaned and a LTI will be performed after every firing cycle. Any malfunctions will be analyzed by NFTTU armorers, who will then determine the malfunction type. All maintenance procedures called out in the shotgun owner's manual will be adhered to, and all malfunctions attributed to the firearm(s) will be recorded.

Non-destructive testing shall be conducted on each firearm after completion of the reliability/durability test and at any other time deemed necessary or desirable. The key firearm components (barrel, bolt, pump action assembly, and receiver) shall be free of cracks.

4.19 High Temperature. Three shotgun samples will be temperature conditioned in an environmental chamber at 160 $\pm$5°F and 0% humidity for 8 hours. After 8 hours of temperature conditioning each shotgun will be used to fire 40 rounds of duty ammunition (30 rounds 00 buckshot and 10 rounds of 1 oz slug ammunition) within 20 minutes after removal from the environmental chamber. Any malfunction will be recorded and analyzed by NFTTU armorers.

4.20 Low Temperature. Three shotgun samples will be temperature conditioned in an environmental chamber at -45 $\pm$5°F and 0% humidity for 8 hours. After 8 hours of temperature conditioning each shotgun will be used to fire 40 rounds of duty ammunition (30 rounds 00 buckshot ammunition and 10 rounds of 1oz slug ammunition) within 20 minutes after removal from the environmental chamber. The ammunition used will also be temperature conditioned at -45°F for 8 hours. Any malfunction will be recorded and analyzed by NFTTU armorers.

4.21 Salt Water Immersion. Three shotgun samples will be immersed in 5% (by weight) saline solution at a depth of 6 inches for one minute. Upon removal from the saline solution, the shotguns will be subjected to environmental conditioning at 70 $\pm$5°F and 70% humidity for 24 hours in an environmental conditioning chamber. After environmental conditioning, each shotgun will be used to fire 40 rounds of duty ammunition (30 rounds 00 buckshot ammunition and 10 rounds of 1oz slug ammunition) within 20 minutes after removal from the environmental chamber. Any malfunction observed will be recorded and analyzed by NFTTU armorers.

4.22 Sand & Dust. Three shotgun samples will be subjected blowing sand and dust. After sand and dust conditioning, each shot gun will be 40 rounds of duty ammunition (30 rounds of 00 buckshot ammunition and 10 rounds of 1oz slug ammunition). Any malfunction observed will be recorded and analyzed by NFTTU armorers.

4.23 Parts Interchange. Prior to the reliability tests, an NFTTU armorer will field strip all samples submitted. All parts and assemblies to include; the forearm unit, consisting of the forearm assembly; the breech and bolt assembly; trigger plate assembly; the stock assembly and barrel will be sorted and placed in individual bins. All individual components within the assemblies and parts such as the barrel; all magazine parts such as caps and extensions will be inspected for metal burrs, sharp edges and workmanship. A second NFTTU armorer will reassemble the shotguns. Any components found not to interchange will be placed aside and thoroughly inspected. The number of parts interchangeable between each shotgun and need for any tools to perform the disassembly will be noted.

4.24 Drop Test. Three shotgun samples shall undergo 3-foot drop testing onto a concrete pad. One shotgun shall be oriented to drop so as to land on the muzzle, one shotgun shall be oriented to drop so as to land on the butt of the shotgun stock, and one shotgun shall be oriented to drop so as to land on the top of the barrel/receiver. The shotgun will contain a magazine loaded with dummy ammunition. A cartridge case containing a live primer will be in the chamber during the drop test. After drop testing, the shotguns will undergo a LTI by NFTTU armorers and 5 rounds of duty 00 buckshot ammunition will be fired in each

shotgun. Any discharges during the drop test and malfunctions during subsequent firing observed will be recorded and analyzed by NFTTU armorers.

4.25 Shot Pattern/Accuracy.

4.25.1 Shot Pattern. Shot pattern will be evaluated at 25 yards by shooting three 10-shot groups each with three separate shotguns (using duty 00 buckshot ammunition). The shotgun will be mounted in a special test fixture. A 25 inch diameter circular template will be placed over the geometric center of the shot pattern to ascertain shot pattern.

4.25.2 Accuracy. Accuracy will be evaluated at 50 yards by shooting three 10-shot groups each with three separate shotguns (using duty 1 oz slug ammunition). The shotgun will be mounted in a special test fixture and an optical target will be used to record the groups. The mean radius and extreme spread will be calculated and recorded by an Oehler model 83 computer.

STATEMENT OF WORK (SOW) II: 12 GAUGE MARINE SHOTGUNS

1.0 SCOPE

This specification delineates performance criteria and tests to be used for the evaluation of marine shotgun for US Immigration and Customs Enforcement (ICE), Department of Homeland Security (DHS).

2.0 APPLICABLE DOCUMENTS

2.1 General. This specification lists all performance requirements for the acquisition of ICE marine use shotguns.

2.2 Government Documents. The following documents form a part of this document to the extent specified herein:

MIL-STD-810F: Department of Defense Test Method Standard for Environmental Engineering Considerations and Laboratory Tests

2.3 Non-Government publications. The following documents form a part of this document to the extent specified herein:

ANSI/SAAMI Z299.2-1992: Voluntary Industry Performance Standards for Pressure & Velocity of Shotshell Ammunition for the Use of Commercial Manufacturers
Sporting Arms and Ammunition Manufacturer's Institute (SAAMI)
P.O. Box 262
Frankfort, NY 13340

ISO 9001:2000, Quality Management Systems Requirements
International Organization for Standardization
1, rue de Varembe, Case postale 56
CH-1211 Geneva 20, Switzerland

(Non-Governmental standards and other publications are normally available from the organizations that prepare or distribute the documents. These documents may also be available in or through libraries or other informational services).

2.4 Order of Precedence. In the event of a conflict between the text of this specification and the references cited herein, this document takes precedence.

3.0 REQUIREMENTS

3.1 General. US ICE, an agency under the Department of Homeland Security (DHS), has a requirement for a 12-gauge marine shotgun. Each vendor will be allowed to submit one specific 12-gauge marine shotgun nomenclature. A solicitation sample of 12 shotguns shall be required for evaluation and testing.

3.2 Solicitation Tests. The solicitation testing will verify that the initial shotgun sample supplied by each competing vendor meets the minimum requirements of this specification. Vendors will be rated on their ability to achieve and/or surpass all performance parameters detailed in Table I. Those performance characteristics listed under Basic Compliance criteria shall be documented by the contractor and/or determined by Non Destructive Inspection (NDI). Major performance characteristics are requirements that will be ascertained by functional testing of the ammunition. Testing may be halted for any sample (and the associated sample rejected) when a shotgun from that sample fails any Basic Compliance or Major requirement (as determined by NFTTU). Testing will be halted if a shotgun from that sample exhibits hazardous and/or unsafe attributes (as determined by NFTTU). All samples submitted pursuant to solicitation testing will become property of DHS/ICE NFTTU upon receipt and will not be returned.

Table I: Requirements Verification Test Matrix

	Performance Characteristic	Requirement Paragraph	Test Method	Solicitation	FAT	LTI
Basic Compliance	Sample Size	3.6	4.2	X	X	
	Documentation	3.5	4.3	X	X	
	Quality System	3.3	4.4	X		
	Action/Mechanism	3.7	4.5	X	X	X
	Overall Length	3.8	4.6	X	X	X
	Weight	3.9	4.7	X	X	X
	Gauge	3.10	4.8	X	X	X
	Firing Pin Indent	3.11	4.9	X	X	
	Trigger	3.14	4.12	X	X	X
	Finish	3.15	4.13	X	X	X
	Safety	3.16	4.14	X	X	X
	Barrel	3.17	4.15	X	X	X
	Magazine	3.18	4.16	X	X	X
Major	Reliability/Durability	3.20	4.18	X	X	
	High Temperature	3.21	4.19	X	X	
	Low Temperature	3.22	4.20	X	X	
	Salt Fog	3.23	4.21	X	X	
	Sand & Dust	3.24	4.22	X	X	
	Parts Interchange	3.25	4.23	X	X	
	Drop Test	3.26	4.24	X	X	
	Shot Pattern/Accuracy	3.27	4.25	X	X	
Minor	Stock/Forearm	3.12	4.10	X	X	X
	Sling Attachments	3.13	4.11	X	X	X
	Sights	3.19	4.17	X	X	X

3.3 Quality Control (QC). The contractor shall have a QC system in place. It is desired that the manufacturer have a quality system that is commensurate with ISO 9001: 2000, Quality Management Systems Requirements.

3.3.1 Quality Control (QC)/Quality Assurance (QA). The manufacturer shall provide a QC/QA process synopsis including examples of their quality plans for the manufacturing of the shotguns representing their solicitation sample.

3.3.2 First Article Test (FAT). The specifications annotated for FAT in Table I will be verified during the FAT. All firearms must exhibit performance that is comparable to what was exhibited during solicitation testing for all requirements during the FAT. At the government's discretion, DHS/ICE NFTTU may elect to reduce the number of specifications that are subjected to testing during the FAT process. All samples submitted pursuant to FAT will become property of DHS/ICE NFTTU upon receipt and will not be returned. The Government may invoke a FAT for any of the following conditions (after contract award):

a. Design change of the shotgun or shotgun components.

b. Relocation of vendor's production facility.

c. Vendor changes supplier of critical components (barrel, receiver, internal mechanism parts).

The contractor shall be responsible for notifying the government prior to enacting any of the above changes and for conducting an FAT for any of the above conditions.

3.4 Limited Technical Inspection (LTI). An LTI will be conducted for every firearm delivered after the first article. All firearms must exhibit performance that is comparable to what was exhibited during solicitation testing for all requirements during LTI. The specifications annotated for LTI in Table I will be verified during the LTI.

3.5 Documentation. The supplier shall provide the following documentation (unless otherwise annotated) detailing the performance of the shotgun sample submitted for solicitation, and First Article Test (FAT):

-Owner's Manual, including recommended maintenance procedures and intervals.

-Description of manufacturing process.

-Written synopsis of Company's Quality Control System.

-Detailed response to each of the basic compliance requirements (on how the requirements are fulfilled)

3.6 Sample Size. Twelve shotguns shall be submitted for solicitation testing and/or FAT evaluation.

3.7 Action/Mechanism. The action shall be a pump-action. The action shall be designed to operate smoothly during cycling with no binding. The mechanism shall possess an inertia firing pin, and a balanced sear, or similar component, to prevent accidental discharges if the firearm is dropped. The feeding mechanism shall allow for the clearing of a cartridge over carrier feed malfunction using hand pressure only and striking the gun on a solid object. The shotgun shall be capable of being unloaded by removing the cartridges directly from the magazine. The firearm shall be able to be safely operated by a shooter wearing gloves.

3.8 Overall Length. The overall length of the shotgun shall not exceed 35".

3.9 Weight. The empty weight of the shotgun shall not exceed 8 lbs.

3.10 Gauge. The shotgun shall be chambered for 12-gauge 3 inch magnum cartridges. All chamber dimension specifications and pressure limitations shall conform to the Sporting Arms and Ammunition Manufacturer's Institute (SAAMI) specifications for 12-gauge (chambered for 3 inch magnum cartridges) shotguns.

3.11 Firing Pin Indent. Firing pin indentation shall conform to the SAAMI specifications for 12-gauge shotguns.

3.12 Stock/Forearm. The stock shall be a fixed, vertical pistol grip stock constructed of a durable composite material with adjustments for length and equipped with a spring loaded recoil dampening system and recoil absorbing pad. The stock shall be capable of adjusting the length of pull (LOP) over at least a 3 inch range, measured from the center of the curve of the trigger to the center of the recoil pad. The stock shall have a black, non-reflective finish and incorporate a non-slip grip finish.

The forearm shall be constructed of the same material as the stock, have a non-reflective finish with a non-slip, raised rib type grip surface to prevent the shooter's hand from sliding off the grip. The design shall be equal to or better than the Speedfeed LE forearm, part number 0256. The forearm shall not cover any portion of the ejection or loading ports when pulled fully to the rear. It is desired that shotgun have the option of being supplied with a forearm that incorporates an integral light mount on a "1913 rail" with covers, to accommodate the attachment of a light. The forearm with "1913 rail" light mount is not required to be the same material as the stock. The "1913 rail" may be of a different material than the forearm.

3.13 Sling Attachments. The shotgun shall be equipped with sling attachments that accommodate the use of a 1 ¼" wide sling. The front sling attachment shall be designed to accommodate a left side, right side or bottom sling attachment and shall be positioned on the shotgun between the muzzle and the front end of the forearm. The sling attachment shall not swivel. The rear sling attachment shall be permanently attached to the firearm within 3 inches of the toe of the recoil pad (on the underside of the stock).

3.14 Trigger. The trigger pull shall be not less than 5 pounds and not more than 8 pounds force.

3.15 Finish. The external finish shall be non-reflective. All parts shall be constructed of or coated with a material that is corrosion resistant and suitable for extended use in a salt water marine environment.

3.16 Safety. The shotgun shall be equipped with an externally controlled, manual, and non-locking safety mechanism that possesses both a "safe" and "fire" position. When in the "safe" position, the safety

mechanism shall prevent the firearm from firing. The shooter shall be able to visually and physically verify the position of the safety.

3.17 Barrel. The barrel shall have a non-removable modified choke. Barrel length shall be a minimum of 14 inches and a maximum of 14.5 inches. Barrels shall be easily interchangeable without special tools.

3.18 Magazine. The magazine shall have a capacity to hold five (5) 2 ¾ inch, 12-gauge cartridges loaded at the maximum overall length as specified by SAMMI for 12-gauge ammunition. The magazine follower shall be of a highly visible color, non-binding, and resistant to particle accumulation. The shooter shall be able to ascertain if the magazine is empty by either visually or physically checking the position of the follower.

3.19 Sights. The front sight shall be of a snag resistant, square steel blade design of sufficient height to afford zeroing the sights to point of impact, with a black or dark gray non-reflective finish and equipped with a tritium insert that is contained in a break resistant ampoule. The front sight shall be non-adjustable for windage and elevation. The front sight shall not have side guards/wings. The rear sight shall be of a large-aperture "ghost ring" design, with a black or dark gray non-reflective finish and mounted at the rear of the receiver. The rear sight assembly shall be removable and allow the top to the receiver to be unobstructed after the rear sight assembly is removed. The rear sight shall be fully adjustable for windage and elevation, and equipped with tritium inserts contained in break resistant ampoules. The tritium inserts shall be placed in the rear sight that, when properly aligned with the front sight, will form a horizontal line or "3 dot configuration" over the target. The rear sight shall not have side guards/wings. The rear sight shall be designed for replacement without the use of special tools or soldering. The rear sight shall be designed to allow replacement of the ring aperture without requiring the replacement of the entire sight assembly, unless replacing the entire rear sight is similar in time and cost to replacing the aperture ring only. Both the front and rear sights shall be able to withstand 3-foot drop testing without rendering the sights unserviceable. Tritium failure during the drop test will not be considered unserviceable.

3.20 Reliability/Durability. The shotgun shall be able to fire 10,000 rounds of duty ammunition (7,500 rounds of standard load, full power, 00 buckshot and 2,500 rounds standard, full power load, 1 oz. slug) with no more than the number and types of malfunctions (not due to ammunition and for a single shotgun) listed in Table II.

Table II: Reliability/Durability Malfunction and Type Allowance Per Shotgun

Class	# Malfunctions	Type
1	17	Malfunction can be cleared by the operator under 10 seconds.
2	7	Malfunction that cannot be cleared by operator within 10 seconds; but can be cleared by operator with equipment immediately available to a law enforcement officer in the field (i.e., Leatherman-type tool or pocketknife).
3	1	Malfunction not correctable by operator and requires a higher level of maintenance. This may include the replacement or repair of a part other than the barrel, bolt, pump action assembly, or receiver.
4	0	Catastrophic malfunction that requires replacement of the barrel, bolt, pump action assembly, receiver, and/or anything that affects safe operation.

Table III: High/Low Temperature, Salt Fog, Sand & Dust Malfunction Type Allowance Per Shotgun

Class	# Malfunctions	Type
1	1	Malfunction can be cleared by the operation under 10 seconds.
2	0	Malfunction that cannot be cleared by operator within 10 seconds; but can be cleared by operator with equipment immediately available to a law enforcement officer in the field (i.e., Leatherman-type tool or pocketknife).
3	0	Malfunction not correctable by operator and requires a higher level of maintenance.
4	0	Catastrophic malfunction that requires replacement of the barrel, bolt, pump action assembly, receiver, and/or anything that affects safe operation.

3.21 High Temperature. The shotgun shall exhibit not more than the number and type of malfunctions listed in Table III during a 40 round firing cycle, after temperature soaking of the shotgun for 8 hours at $160^{o}\pm5$F.

3.22 Low Temperature. The shotgun shall exhibit not more than the number delineated for each type of malfunction listed in Table III during a 40 round firing cycle, after temperature soaking of the shotgun for 8 hours $-45^{o}\pm5$F.

3.23 Salt Fog. It is desired that the shotgun exhibit no corrosion any of the major parts. The shotgun shall exhibit not more than the number delineated for each type of malfunction listed in Table III during a 40 round firing cycle, after completing four, 24 hour salt fog exposures each followed by a 24 hour dry cycle in an environmental chamber at 70°F and 50% humidity in accordance with MIL-STD-810F.

3.24 Sand & Dust. The shotgun shall exhibit not more than the number and type of malfunctions listed in Table III, during a 40 round firing cycle, after being subject to a blowing sand and dust environment in accordance with MIL-STD-810F.

3.25 Parts Interchange. All shotgun components of the same model subjected to field-stripping shall be 100% interchangeable between shotguns without additional fitting or alternation. Upon re-assembly, the shotgun shall be fully functional.

3.26 Drop Test. The shotgun shall be equipped with a discharge control mechanism that is designed to prevent the firearm from discharging as a result of an impact, while the hammer is in the cocked position, with the safety off. Additionally, the shotgun shall be serviceable and exhibit no major damage as the result of being dropped on a concrete pad from a height of three feet in the following orientations:

a. Muzzle facing the concrete pad.

b. Butt of stock down facing the concrete pad.

c. Top of the receiver and barrel facing the concrete pad.

Major damage is defined as damage that would result in the gun being unsafe to fire, discharging during testing or malfunctioning during firing.

3.27 Shot Pattern/Accuracy.

3.27.1 Shot Pattern. The shotgun shall be able to place at least 8 of 9 of the buckshot pellets (using duty 00 buck shot ammunition) within a 25 inch diameter circle at a range of 25 yards.

3.27.2 Accuracy. The shotgun shall exhibit a mean radius of no greater than 2.75 inches and an extreme spread of no more than 8 inches when firing duty standard load 1oz slug ammunition at a range of 50 yards.

4.0 VERIFICATION

4.1 Performance verification. Table I details all performance criteria. Except as otherwise specified, ICE NFTTU reserves the right to perform any of the inspections and tests set forth in this specification where such inspections and tests are necessary to ensure that supplies and services conform to prescribed requirements.

4.2 Sample Size. All samples will be visually inspected to ensure the proper sample size was submitted.

4.3 Documentation. All required documentation shall accompany the samples and will be examined by NFTTU for accuracy.

4.4 Quality Control (QC). The government will analyze the vendor's QC system description for basic compliance. If the contractor is ISO 9001:2000 certified, they shall submit written proof of ISO 9001:2000 certification from an accredited agency. NOTE: ISO 9001:2000 certification is not required, but will

suffice for compliance with 3.3. Additionally, government personnel may perform a QC system audit after contract award. If conducted, the audit will be performed at the vendor's manufacturing facility.

4.5 Action/Mechanism. All samples submitted will be visually and physically examined by NFTTU armorers to ensure compliance.

4.6 Overall Length. All samples submitted will have the overall length measured with a calibrated scale to verify dimension.

4.7 Weight. All samples submitted will be weighed using a calibrated electronic scale to verify weight.

4.8 Gauge. All samples submitted will have the chamber dimensions verified physical inspection and the use of certified (in accordance with SAAMI) go/no-go gauges.

4.9 Firing Pin Indentation. All samples submitted will have the firing pin indent verified following NFTTU testing procedures.

4.10 Stock/Forearm. All samples submitted will be visually and physically examined by NFTTU armorers to ensure compliance.

4.11 Sling Attachments. All samples submitted will be visually and physically examined by NFTTU armorers to ensure compliance.

4.12 Trigger. All samples submitted will have the trigger pull measured by a calibrated trigger pull tester.

4.13 Finish. All samples submitted will be visually and physically examined by NFTTU armorers to ensure compliance.

4.14 Safety. All samples submitted will be visually and physically examined by NFTTU armorers to ensure compliance of the shotgun safety mechanism. The safety mechanism of all samples submitted shall tested for compliance by actuating and checking for function every 200 rounds during the reliability/durability test phase.

4.15 Barrel. All samples submitted will have the barrel length measured with a calibrated scale to verify dimension.

4.16 Magazine. All samples submitted will be visually and physically examined by NFTTU armorers to ensure compliance. The shotgun must be designed to hold five rounds of SAAMI maximum length rounds. Five dummy rounds will be measured with a caliper to determine their combined total length. The combined total length of five maximum SAAMI length 12 gauge cartridges will be calculated. The difference between actual and SAAMI maximum will then be calculated. The five dummy rounds will be loaded into the shotgun magazine tube. The last round must be able to be pushed further forward into the magazine tube at least the calculated difference

4.17 Sights. All samples submitted will be visually and physically examined by NFTTU armorers to ensure compliance.

4.18 Reliability/Durability. All samples submitted will undergo a 3,000 round (per shotgun) reliability test in multiples of 200 round firing cycles. Three shotguns will also undergo an additional 7,000 round (per shotgun) durability test in multiples of 200 round firing cycles. Each firing cycle will consist of 150 rounds of duty 00 buckshot ammunition followed by 50 rounds of 1 oz slug ammunition for a total of 50 cycles. The shotguns will be cleaned and a LTI will be performed after every firing cycle. Any malfunctions will be analyzed by NFTTU armorers, who will then determine the malfunction type. All maintenance procedures called out in the shotgun owner's manual will be adhered to, and all malfunctions attributed to the firearm(s) will be recorded.

Non-destructive testing shall be conducted on each firearm after completion of the reliability/durability test and at any other time deemed necessary or desirable. The key firearm components (barrel, bolt, pump action assembly, and receiver) shall be free of cracks.

4.19 High Temperature. Three shotgun samples will be temperature conditioned in an environmental chamber at 160 $\pm 5^{\circ}$F and 0% humidity for 8 hours. After 8 hours of temperature conditioning each shotgun will be used to fire 40 rounds of duty ammunition (30 rounds 00 buckshot ammunition and 10 rounds of 1oz slug ammunition) within 20 minutes after removal from the environmental chamber. Any malfunction will be recorded and analyzed by NFTTU armorers.

4.20 Low Temperature. Three shotgun samples will be temperature conditioned in an environmental chamber at -45 $\pm 5^{\circ}$F and 0% humidity for 8 hours. After 8 hours of temperature conditioning each shotgun will be used to fire 40 rounds of duty ammunition (30 rounds 00 buckshot ammunition and 10 rounds of 1oz slug ammunition) within 20 minutes after removal from the environmental chamber. The ammunition used will also be temperature conditioned at -45°F for 8 hours. Any malfunction will be recorded and analyzed by NFTTU armorers.

4.21 Salt Fog. Three shotgun samples will be placed in an environmental chamber and exposed to 5% (by weight) salt fog for a period of 24 hours; the shotguns will be subjected to environmental conditioning at 70 $\pm 5^{\circ}$F and 70% humidity for 24 hours in an environmental conditioning chamber. After environmental conditioning, each shotgun will be used to fire 40 rounds of duty ammunition (30 rounds 00 buckshot ammunition and 10 rounds of 1oz slug ammunition) within 20 minutes after removal from the environmental chamber. Any malfunction observed will be recorded and analyzed by NFTTU armorers.

4.22 Sand & Dust. Three shotgun samples will be subjected blowing sand and dust. After sand and dust conditioning, each shotgun will be used to fire 40 rounds of duty ammunition (30 rounds 00 buckshot ammunition and 10 rounds of 1oz slug ammunition). Any malfunction observed will be recorded and analyzed by NFTTU armorers.

4.23 Parts Interchange. Prior to the reliability tests, an NFTTU armorer will field strip all samples submitted. All parts and assemblies to include the forearm unit, consisting of the forearm assembly; the breech and bolt assembly; trigger plate assembly; the stock assembly and barrel will be sorted and placed in individual bins. All individual components within the assemblies and parts such as the barrel, all magazine parts such as caps, and extensions will be inspected for metal burrs, sharp edges and workmanship. A second NFTTU armorer will reassemble the shotguns. Any components found not to interchange will be placed aside and thoroughly inspected. The number of parts not interchangeable between each shotgun and need for any tools to perform the disassembly will be noted.

4.24 Drop Test. Three shotgun samples shall undergo 3-foot drop testing onto a concrete pad. One shotgun shall be oriented to drop so as to land on the muzzle, one shotgun shall be oriented to drop so as to land on the butt of the shotgun stock, and one shotgun shall be oriented to drop so as to land on the top of the barrel/receiver. The shotgun will contain a magazine loaded with dummy ammunition. A cartridge case containing a live primer will be in the chamber during the drop test. After drop testing, the shotguns will undergo a LTI by NFTTU armorers and 5 rounds of duty 00 buckshot ammunition will be fired in each shotgun. Any discharges during the drop test and malfunctions during subsequent firing observed will be recorded and analyzed by NFTTU armorers.

4.25 Shot Pattern/Accuracy.

4.25.1 Shot Pattern. Shot pattern will be evaluated at 25 yards by shooting three 10-shot groups each with three separate shotguns (using duty 00 buckshot ammunition). The shotgun will be mounted in a special test fixture. A calibrated 25 inch diameter circular template will be placed over the geometric center of the shot pattern to ascertain shot pattern.

4.25.2 Accuracy. Accuracy will be evaluated by 50 yards by shooting three 10-shot groups each with three separate shotguns (using duty 1 oz slug ammunition). The shotgun will be mounted in a special test fixture and an optical target will be used to record the groups. The mean radius and extreme spread will be calculated and recorded.

Questions and Answers Regarding Solicitation HSCESS-09-Q-00001

1. Statement of Work (SOW) Page 10, Paragraph 3.12 Stock/Forearm: calls for a spring loaded recoil dampening system and recoil absorbing pad. Stock shall be equal to or better than the Knoxx Model Special Ops Stock, part number 04100. Are other recoil reducing methods allowable? As written all other providers of recoil reducing technology are excluded as they use different methods to provide recoil reduction. This would appear to represent a to sole source to Blackhawk/Knoxx due to less then 30 days between contract release and submission to develop alternative designs.

Answer: Yes. Paragraph 3.12 on page 3 and paragraph 3.12 on page 11 of the SOWs have been revised to read as shown in Attachment 1.1 entitled, "Statements of Work for 12 Gauge Shotguns."

2. Page 11, Paragraph 3.19 Sights: The rear sight assembly shall be removable to allow the top of the receiver to be unobstructed. Does this represent for removal for maintenance/repair only?

Answer: This represents removal for maintenance/repair or installation of optics or a "picatinny rail." The removal of the sight and its base (if this is required would leave an unobstructed view across the top of the receiver and permit the installation of optics.

Concerning the Stock/Forearm (pg.3 of Attachment 1)

3. What is the dimensional tolerance in the 13 inch and 13.75 inch length of pull stocks?

Answer: The dimensional tolerance is $\pm$0.125 inches.

4. Can the length of pull requirement be waived when using the off the shelf Speedfeed® III Tactical Buttstock with integral magazine tubes?

Answer: Yes.

5. Can the length of pull requirement be waived when using the off the shelf Knoxx Model Special Ops Stock?

Answer: No, the Knoxx Stock is adjustable. This adjustability will meet the requirement.

6. Must the forearm with "1913 rail" light mount be the same material as the buttstock?

Answer: No. Paragraphs 3.12 of the SOWs have been revised to read as shown in Attachment 1.1 entitled, "Statements of Work for 12 Gauge Shotguns."

7. May the "1913 rail" be of a different material than the forearm?

Answer: Yes. Paragraphs 3.12 of the SOWs have been revised to read as shown in Attachment 1.1 entitled, "Statements of Work for 12 Gauge Shotguns."

Concerning the Sling Attachment (pg.3 of Attachment 1)

8. Does a single sling attachment device need to be adjustable for left side, right side or bottom attachment or should the shotgun be able to use a sling attachment set up for any of the three mounting options?

Answer: A single sling attachment devices needs to be adjustable for left side, right side, or bottom attachment. Paragraphs 3.13 of the SOWs have been revised to read as shown in Attachment 1.1 entitled, "Statements of Work for 12 Gauge Shotguns."

9. May the Sling Attachment swivel?

Answer: No. Paragraphs 3.13 of the SOWs have been revised to read as shown in Attachment 1.1 entitled, "Statements of Work for 12 Gauge Shotguns."

10. The front sling as currently described, does not exist. Wilson Combat and GG&G make attachments that are for either side or below. Is this what is being referred to in this paragraph?

Answer: Paragraph 3.13 has been revised to read as shown in Attachment 1.1 entitled, "Statements of Work for 12 Gauge Shotguns."

Concerning the Trigger (pg.4 of Attachment 1)

11. What is the NFTTU procedure for measuring trigger force?

Answer: A calibrated Dvorak TriggerScan with a firearm support fixture is used.

Concerning the Finish (pg.4 of Attachment 1)

12. What are the parameters for "corrosion resistant"?

Answer: For general duty shotgun, the ability to prevent formation of corrosion under normal operating conditions. Paragraph 3.15 of SOW I: 12 Gauge Duty Shotguns have been revised to read as shown in Attachment 1.1 entitled, "Statements of Work for 12 Gauge Shotguns."

Concerning the Magazine (pg.4 of Attachment 1)

13. How will the magazine capacity be measured? Will dummy rounds be used? *(Specification says SAAMI maximum shotshell length but actual maximum length is less for all major manufacturers including dummy rounds.)*

Answer: The shotgun must be designed to hold five rounds of SAAMI maximum length rounds. Five dummy rounds will be measured with a caliper to determine their combined total length. The combined total length of five maximum SAAMI lenthg 12 gauge cartridges will also be calculated. The difference between actual and SAAMI maximum will then be calculated. The five dummy rounds will then be inserted into the shotgun magazine tube. The last round must be able to be pushed further forward into the magazine tube at least the calculated difference.

Concerning the Sights (pg.4 of Attachment 1)

14. Can the front sight have protective wings?

Answer: No. Paragraphs 3.19 of the SOWs have been revised to read as shown in Attachment 1.1 entitled, "Statements of Work for 12 Gauge Shotguns."

15. Is the specification referring to "top of the receiver needs to be unobstructed" after the rear sight is removed? If no, what dimension defines how much of the top receiver needs to be unobstructed?

Answer: Yes.

16. Are you planning on ever mounting anything on the top of the receiver forward of the rear sight system?

Answer: Possibly, but not while the sight system is in place.

16a. And if so would it require threaded holes?

Answer: No.

17. Can the rear sight have protective wings?

Answer: No. Paragraphs 3.19 of the SOWs have been revised to read as shown in Attachment 1.1 entitled, "Statements of Work for 12 Gauge Shotguns."

18. When service is required, can the entire rear sight be replaced if doing so is similar in time and cost to the aperture ring only?

Answer: Yes. Paragraphs 3.19 of the SOWs have been revised to read as shown in Attachment 1.1 entitled, "Statements of Work for 12 Gauge Shotguns."

Concerning the Reliability/Durability (pg.4 of Attachment 1)

19. Have the operators conducting the testing undergone Factory approved training and have experience with multiple manufactures products?

Answer: No, the operators have not.

20. Do defective ammunition issues count toward quantity of malfunctions?

Answer: No.

21. How is cause of malfunction determined?

Answer: As stated in paragraph 4.18, it is determined by trained NFTTU armorers.

22. What is "equipment immediately available"?

Answer: Immediately available to a law enforcement officer in the field such as a pocket knife or a Leatherman-type tool. Tables II and III of the SOWs have been revised to read as shown in Attachment 1.1 entitled, "Statements of Work for 12 Gauge Shotguns."

23. How is "catastrophic malfunction" defined?
Answer: Anything that affects safe operation or that would require replacement of the barrel, bolt, pump action assembly, or receiver.

24. What is the cleaning procedure performed after every firing cycle?
Answer: Per vendor supplied operator's manual.

25. What are the "key firearm components"?
Answer: Barrel, bolt, pump action assembly, and receiver.

Concerning the High Temperature (pg.5 of Attachment 1)

26. What are the apparatus, procedure and environment parameters for temperature soaking of the shotguns?
Answer: A calibrated Versa Tenney III Environmental Chamber is used per NFTTU written procedures. Eight (8) hours at 160±5°F and 0% humidity. Paragraphs 3.21 and 4.19 of the SOWs have been revised to read as shown in Attachment 1.1 entitled, "Statements of Work for 12 Gauge Shotguns."

27. Are these guns used in the reliability/ durability testing? If yes, is it before or after the temperature testing?
Answer: All 12 guns will go through 3,000 round reliability testing initially. Three guns will then undergo high temperature test. The guns used for high temperature will not be used for the additional 7,000 round durability testing.

Concerning the Low Temperature (pg.5 of Attachment 1)

28. What are the apparatus, procedure and environment parameters for temperature soaking of the shotguns?
Answer: A calibrated Versa Tenney III Environmental Chamber is used per NFTTU written procedures. Eight (8) hours at -45±5°F and 0% humidity. Paragraphs 3.21 and 4.19 of the SOWs have been revised to read as shown in Attachment 1.1 entitled, "Statements of Work for 12 Gauge Shotguns."

29. Are these guns used in the reliability/durability testing? If yes, is it before or after the temperature testing?
Answer: All 12 guns will go through 3,000 round reliability testing initially. Three guns will then undergo low temperature test. The guns used for low temperature will not be used for the additional 7,000 round durability testing.

Concerning the Salt Water Immersion (pg.5 of Attachment 1)

30. What are the apparatus, procedure and environment parameters?
Answer: The test is described in paragraph 4.21, page 7 of the solicitation.

Concerning the Drop Test (pg.5 of Attachment 1)

31. How is major damage defined?
Answer: Damage that would result in the gun being unsafe to fire, discharge during test, or malfunction during firing.

Concerning the Shot Pattern/Accuracy (pg.5 of Attachment 1)

32. What is the special test fixture for accuracy testing?
Answer: A precision return to battery mechanical rest.

33. What ammunition is used?
Answer: As stated in paragraph 3.27.2, standard law enforcement duty 1 ounce slug.

Concerning the Solicitation/Statement of Work in General:

34. Are there any packaging requirements not listed?
Answer: No.

35. Will any factory personnel be allowed to attend the testing?
Answer: No.

36. Are vendors required to be on the DHS Qualified Product List (QPL)?
Answer: No.

37. Please confirm that 12 samples of each of the standard and marine version of the shotgun are required by the proposal due date.

Answer: Yes.

38. If the sample shotguns do not meet a particular specification under the solicitation and is rated unacceptable, does this mean that the proposed product will be rejected even if, for example, the criterion involved is not a significant one? For example, if the weight of the samples shotgun is 8.1 pounds instead of 8.0 pounds, will the sample be rejected?

Answer: Yes, any sample that does not meet all of the criteria outlined in the solicitation will be unacceptable.